



Small Sats + Big Data Analytics = Insights on Chinese Economy

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“More than half of the world’s oil refining capacity is now outside of the OECD, in countries like China and India, where accurate storage data is difficult to come by.”

-Wall Street Journal

Chinese Oil Market

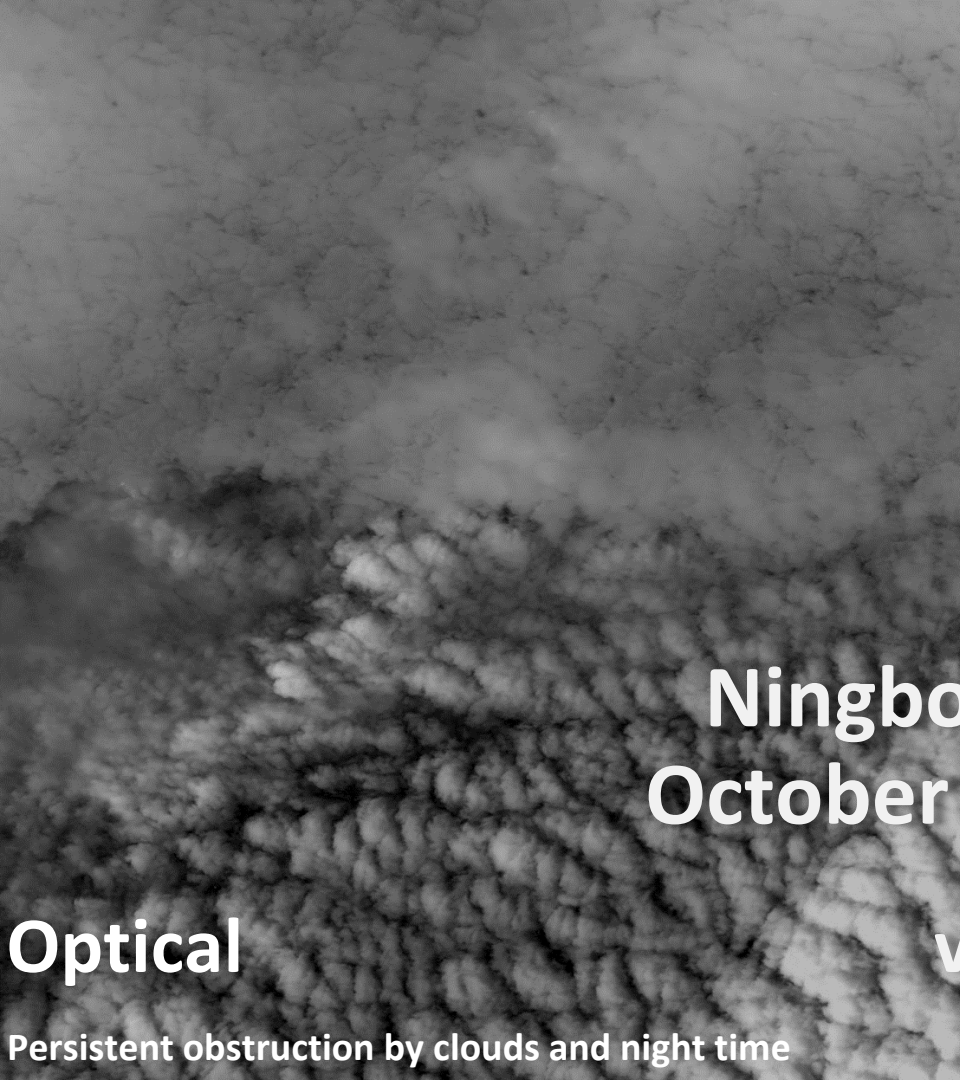


#1 largest oil importer (since 2015)

#2 largest oil consumer

“No data for Chinese oil demand is available from any official source.”

-S&P Global Platts



Ningbo, China
October 12, 2016

Optical

Persistent obstruction by clouds and night time

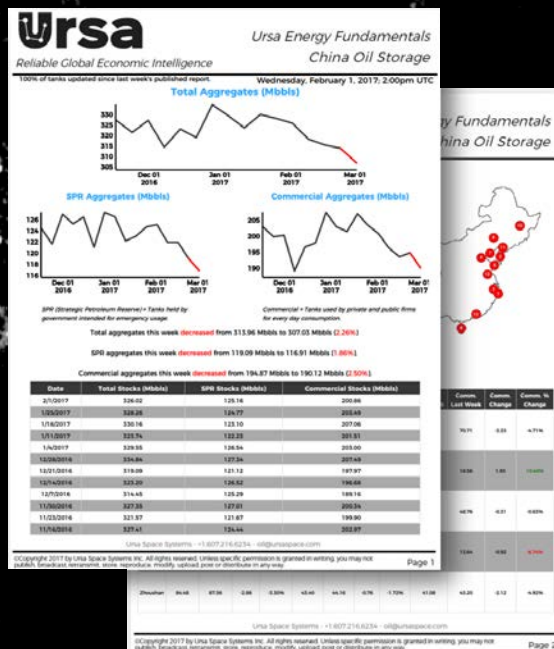
vs.



Radar

Can see clearly through clouds, smog and at night

Ursa Oil Storage Report



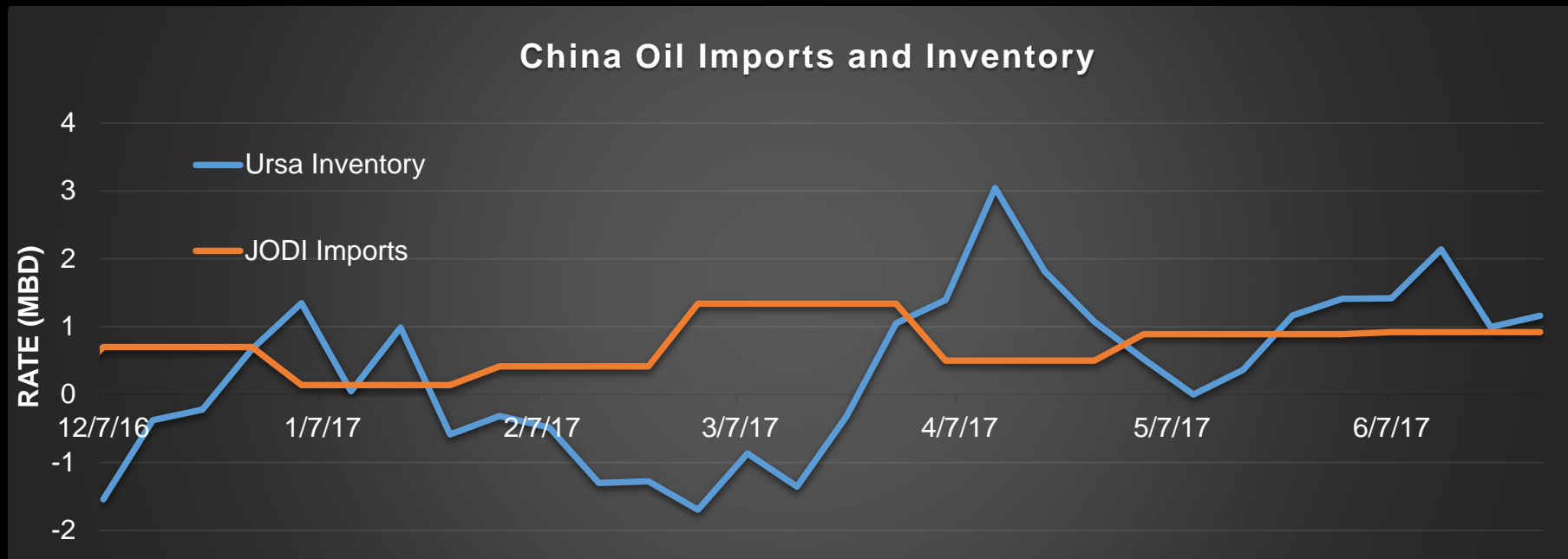
timeStamp	locationName	companyName	tankName	tankVolume	percentFill	crude	storageType
2016-12-30T09:4	DAL	Petrochina	DAL001	189688	0.58	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL002	32538	0.09	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL003	303611	0.78	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL004	81441	0.22	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL005	99911	0.68	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL006	122111	0.84	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL007	72793	0.56	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL008	64627	0.46	Yes	Commercial
2016-12-30T09:4	DAL	Petrochina	DAL009	110698	0.83	Yes	Commercial
2016-12-30T09:4	DAL	Dalian Port Com	DAL010	427598	0.6	Yes	Commercial
2016-12-30T09:4	DAL	Dalian Port Com	DAL011	183605	0.56	Yes	Commercial
2016-12-30T09:4	DAL	Dalian Port Com	DAL012	519962	0.77	Yes	Commercial
2016-12-30T09:4	DAL	Dalian Port Com	DAL013	164039	0.51	Yes	Commercial
2016-12-30T09:4	DAL	Dalian Port Com	DAL014	276303	0.93	Yes	Commercial

Weekly raw data feed (CSV)

Weekly Summary (PDF)



Market-Changing Intelligence

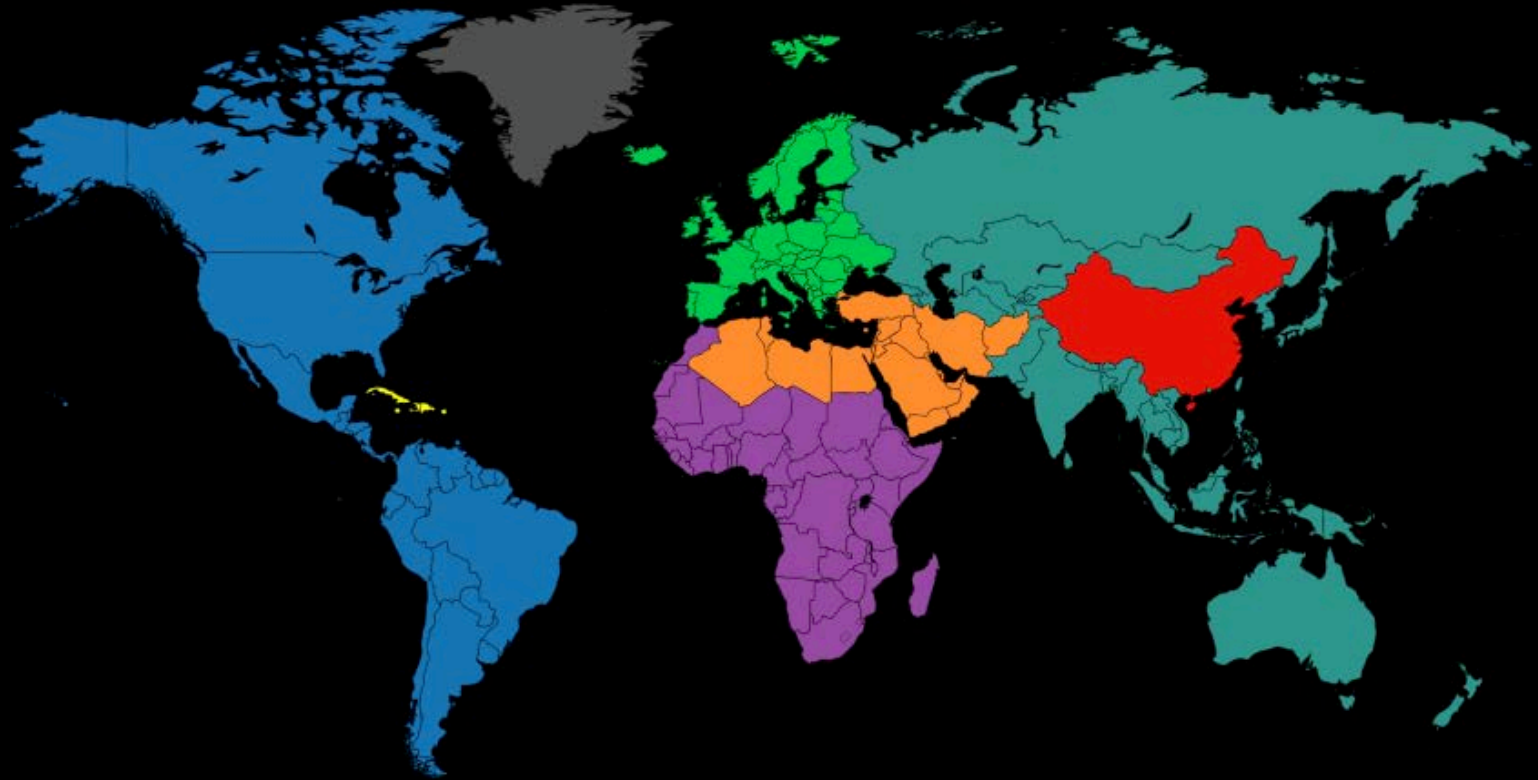


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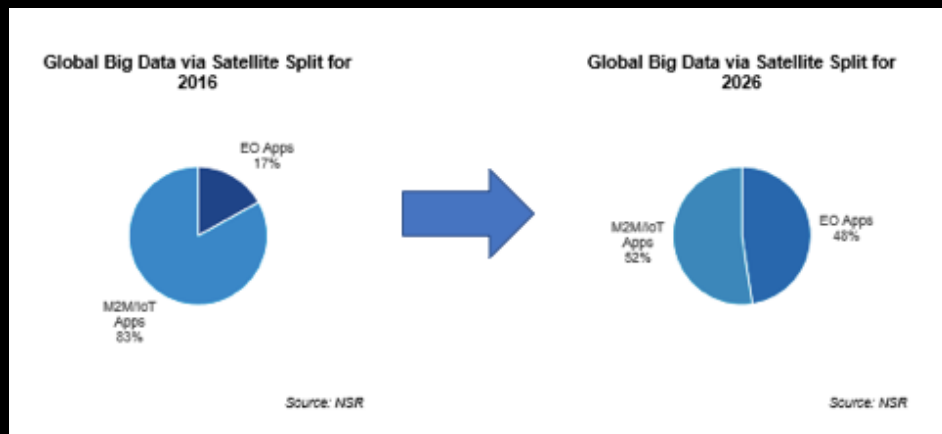
Production + Imports – Exports – Runs = Inventory Change



Expansion to Global Coverage



The Future of Satellite Big Data



NSR Satellite 10 Year Big Data Market Predications:

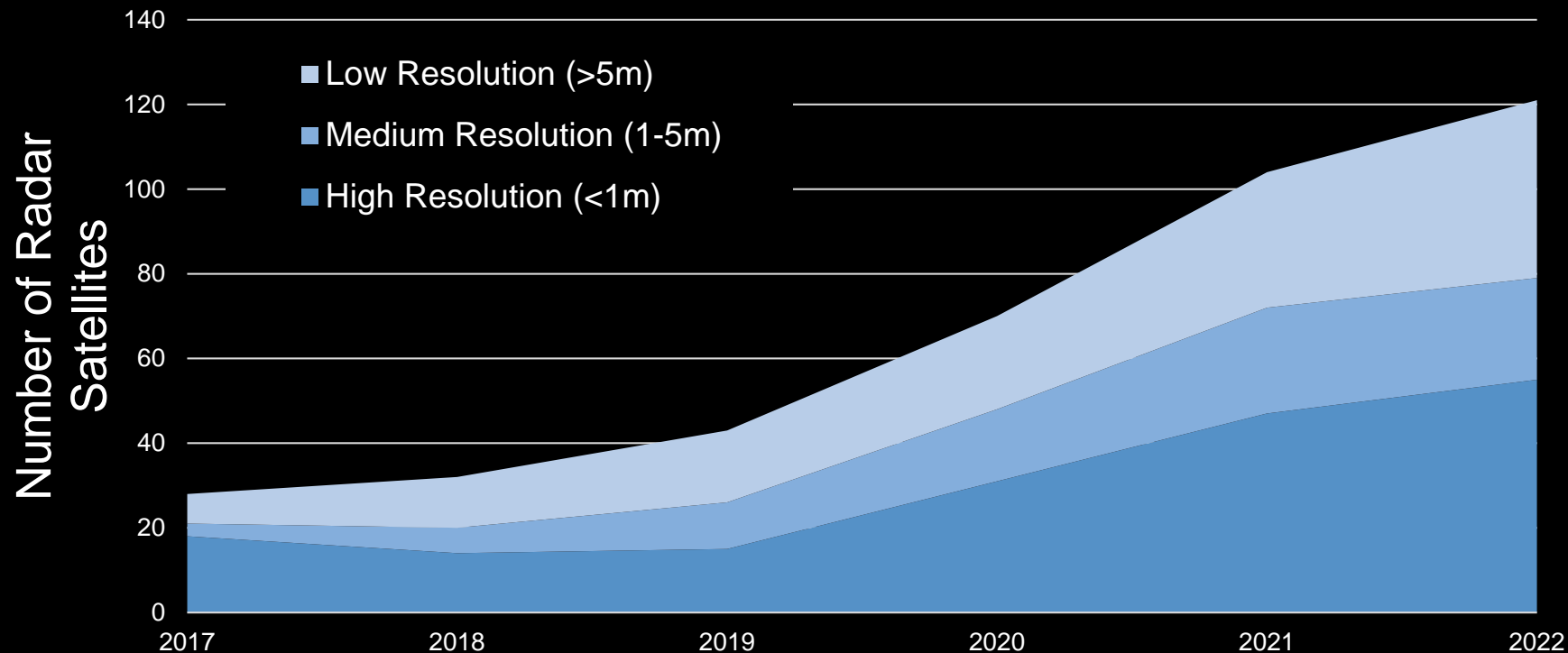
10/1/16: \$6B

4/26/17: \$16B

Source: <http://www.nsr.com/news-resources/the-bottom-line/demystifying-satellite-big-data/>

Is that big enough? Oil and gas data analytics is \$36B alone!

The Future of Radar Satellites





Reliable

> 99% of
planned
measurements
delivered



Timely

Delivery of
analysis results
on defined
schedule



Comprehensive

Worldwide
coverage with
twice daily or
better revisit

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